

A CURRICULUM FOR TRAINING SCHOOLS.



NEW YORK STATE EDUCATION DEPARTMENT

HIGHER EDUCATION

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COURSE OF STUDY AND SYLLABUS

RECOMMENDED BY THE STATE BOARD OF NURSE EXAMINERS

FOR THE GUIDANCE OF NURSE TRAINING SCHOOLS

IN PREPARING THEIR STUDENTS FOR EXAMINATION BEFORE THE STATE
BOARD

Outlined for the State Board by the Committee of Education and
Revised by a Committee Representing the Education Department,
the State Board of Nurse Examiners the New York State
Nurses Association and the Training Schools

ALBANY, N. Y. APRIL 1, 1906

STATE NURSES ASSOCIATION

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Appointed June 9, 1905

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INTRODUCTION

This course of study and syllabus is intended for the guidance of nurse training schools in preparing their students for examinations as provided in the nurse practice act of 1903.

It has been prepared on the request of many nurse training schools desiring assistance in developing their courses of instruction and in improving their methods of training.

It provides for theoretical instruction, teaching by demonstration and service in the hospital wards. While it is not intended that the course as outlined shall interfere with flexibility in the arrangement of subjects, methods of teaching or division of time, it is to be accepted as covering the minimum requirements of the Department and the subjects and methods which it embodies will be the basis of the State examinations.

The full examination will include both a practical demonstration and a written test which includes questions on (1) elementary bacteriology, (2) elementary materia medica, (3) elementary anatomy and physiology, (4) diet cooking, (5) medical nursing including contagious diseases, (6) surgical nursing including gynecology, (7) obstetrical nursing, (8) nursing in children's diseases, (9) genito-urinary (for men). It is to be understood that these subjects are to be taught in their relations to nursing and not to medical practice.

Beginning January 1, 1906, the entrance requirement to nurse training schools is one year at least of registered secondary work or the equivalent, 15 counts in Regents examinations.

The preliminary training as outlined is to be included in the probationary period as part of the regular work in the hospital and the minimum recommendation is for two weeks only, but the time should be lengthened and the instruction broadened according to the facilities of the school, from one to six months. Teaching the new student the simple principles of nursing by demonstration before she is placed in the hospital ward to care for sick patients is a very important and

progressive feature of the curriculum which all nurse schools are urged to adopt.

This course of study and syllabus was outlined for the State Board of Examiners by a committee on education of the New York State Nurses' Association appointed June 9, 1905, a committee composed of women actively engaged in nurse teaching and representing different portions of the State and large, medium and small nurse training schools. It has been carefully revised by a committee representing the Education Department, the training schools of hospitals for the insane, homeopathic schools, the State Association and the Board of Nurse Examiners. It is issued as proof under revision to secure criticisms and suggestions that will insure its practicability, correct its defects and increase its field of usefulness.

NURSE PRACTICE ACT

Laws of New York 1903, ch. 203 in effect April 27

AN ACT TO AMEND THE PUBLIC HEALTH LAW RELATIVE TO THE PRACTICE OF NURSING

§ 206 WHO MAY PRACTISE AS REGISTERED NURSES. Any resident of the State of New York, being over the age of 21 years and of good moral character holding a diploma from a training school for nurses connected with a hospital or sanatorium giving a course of at least two years, and registered by the Regents of the University of the State of New York as maintaining in this and other respects proper standards, all of which shall be determined by the said Regents, and who shall have received from the said Regents a certificate of his or her qualifications to practise as a registered nurse, shall be styled and known as a registered nurse, and no other person shall assume such title, or use the abbreviation R. N. or any other words, letters or figures to indicate that the person using the name is such a registered nurse. Before beginning to practise nursing every such registered nurse shall cause such certificate to be recorded in the county clerk's office of the county of his or her residence with an affidavit of his or her identity as the person to whom the same was so issued and of his or her place of residence within such county. In the month of January, 1906, and in every 36th month thereafter, every registered nurse shall again cause his or her certificate to be recorded in the said county clerk's office, with an affidavit of his or her identity as the person to whom the same was issued, and of his or her place of residence at the time of such reregistration. Nothing contained in this act shall be considered as conferring any authority to practise medicine or to undertake the treatment or cure of disease in violation of article 8 of this chapter.

§ 207 BOARD OF EXAMINERS; EXAMINATION; FEES. Upon the taking effect of this act the New York State Nurses Association shall nominate for examiners 10 of their members who have had not less than five years' experience in their profession, and at each annual meeting of said association thereafter, two other candidates. The Regents of the University of the State of New York shall appoint a board of five examiners from such list. One member of said board shall be appointed for one

year, one for two years, one for three years, one for four years, and one for five years. Upon the expiration of the term of office of any examiner the said Regents shall likewise fill the vacancy for a term of five years and until his or her successor is chosen. An unexpired term of an examiner caused by death, resignation or otherwise, shall be filled by the Regents in the same manner as an original appointment is made. The said Regents, with the advice of the board of examiners above provided for, shall make rules for the examination of nurses applying for certification under this act, and shall charge for examination and for certification a fee of \$5 to meet the actual expenses, and shall report annually their receipts and expenditures under the provisions of this act, to the State Comptroller, and pay the balance of receipts over expenditures to the State Treasurer. The said Regents may revoke any such certificate for sufficient cause after written notice to the holder thereof and hearing thereon. No person shall thereafter practise as a registered nurse under any such revoked certificate.

§ 208 WAIVER OF EXAMINATIONS. The Regents of the University of the State of New York, may upon the recommendation of said board of examiners, waive the examination of any persons possessing the qualifications mentioned in section 206, who shall have been graduated before or who are in training at the time of, the passage of this act and shall hereafter be graduated, and of such persons now engaged in the practise of nursing, as have had three years' experience in a general hospital prior to the passage of this act, who shall apply in writing for such certificate within three years after the passage of this act, and shall also grant a certificate to any nurse of good moral character, who has been engaged in the actual practise of nursing for not less than three years next prior to the passage of this act who shall satisfactorily pass an examination in practical nursing within three years hereafter.

209 VIOLATIONS OF THIS ARTICLE. Any violation of this article shall be a misdemeanor. When any prosecution under this article is made on the complaint of the New York State Nurses Association, the certificate of incorporation of which was filed and recorded in the office of the Secretary of State on the second day of April, 1902, the fines collected shall be paid to said association and any excess in the amount of fines so paid over the expenses incurred by said association in enforcing the provisions of this article shall be paid at the end of each year to the Treasurer of the State of New York.

REGENTS SPECIAL RULES RELATING TO THE REGISTRATION OF NURSES

INCORPORATION. The training school for nurses or the institution of which it is a department must be incorporated, and will be inspected by the Education Department upon receiving its formal application for registration showing that it possesses the minimum requirements.

HOSPITAL FACILITIES. For registration, a nurses training school must be connected with a hospital (or sanatorium)) having not less than 25 beds and the number of beds must be from two to four times the number of students in the school, depending on the character of the hospital's facilities for private or ward patients.

PRELIMINARY EDUCATION. All training schools registered by the Regents of the University of the State of New York shall require of pupils applying for admission a certificate of graduation from a grammar school or its equivalent, preference being given to applicants who have had one year or more in a secondary school and to those who have taken a full course in domestic science in a recognized technical school. After January 1, 1906, a one year secondary course, or its equivalent, will be required.

SUBJECTS OF STATE EXAMINATION. Training schools for nurses registered by the Regents shall provide both practical and theoretic instruction in the following branches of nursing: (1) medical nursing (including *materia medica*), (2) surgical nursing, with operative technic including gynecological, (3) obstetrical nursing (each pupil to have had the care of not less than six cases), (4) nursing of sick children, (5) diet cooking for the sick including (*a*) 12 lessons in cooking in a good technical school, or with a competent diet teacher (*b*) food values, and feeding in special cases, to be taught in classes (not by lectures), (6) a thorough course of theoretical instruction in contagious nursing where practical experience is impossible.

Training schools for male nurses shall provide instruction in genito-urinary branches, in place of gynecological and obstetrical nursing.

PROFESSIONAL EDUCATION. The period of instruction in the training school shall be not less than two full years, during which time students shall not be utilized to care for patients outside of a hospital. Training schools giving a three year course and wishing to continue the practice of utilizing their pupils to earn money for the hospital may send them out to private cases or for district work among the poor for a period not exceeding three months in the third year of their course. But training schools with a two year course wishing to continue the practice must extend their course to meet the above requirements.

COURSE OF STUDY

FACULTY. The minimum force *necessary* to carry out the curriculum comprises a superintendent and an assistant superintendent to afford instruction in practical nursing in all branches, *materia medica*, anatomy and physiology; a dietitian to impart instruction in dietetics in all branches; four lecturers to afford instruction in (1) medicine, (2) surgery and bacteriology, (3) obstetrics and gynecology, (4) children's and contagious diseases.

In small hospitals and training schools the superintendent should, as matron, have charge of the diet and store rooms, and should give the necessary diet kitchen practice. The assistant should have immediate charge of the operating room and wards, and with the doctors give clinical instruction and supervise the ward practice, which should be inspected by the superintendent as frequently as desirable.

The lecturers should have the graduating class and should cover their ground in four lectures each, which can be arranged to be given once a year. If the lecturers are to be paid, the cost may vary from \$3 to \$10 per lecture.

The superintendent of the training school and all nurse assistants should be registered nurses. Paid instructors or physicians should be engaged for definite periods.

OUTLINE OF WARD SERVICE. This arrangement for 25 months' service in the wards is outlined as the minimum requirement of all registered schools. If the course be three years, the probationary term should be from three to six months, and the remaining nine or six months be devoted to specialties and head nurse work and private duty and district work.

Probationary term. This includes one month of preliminary work.

Junior term. This requires at least eight months; in medical nursing for men or women or both, four months; in diet kitchen, one month; on night duty, one month; in surgical nursing (general), two months.

Intermediate term. This requires at least eight months; in the operating room, one month; in special medical and surgical cases, two months; (this time is designed to fill the need for the special nursing of critical cases; when the hospital does not demand such service, it should be added to the regular medical or surgical service); in gynecology, two months; on night duty, two months; on vacation, one month.

Senior term. This requires at least eight months; in obstetrics, one month; with children, three months (one month of this should be night duty, two months day); as senior assistant or head nurse, four months (including massage).

THEORETICAL WORK ARRANGED BY CLASSES. By outlining the theoretical work for three classes of students, the January to enter and graduate January 1; the May to enter and graduate May 1, and the August to enter and graduate August 1 the hospital has the benefit of additional help during vacation period. Each class has at least nine

months of the two years with no theoretical instruction which gives ample time for vacations and special studies. In outlining the course for three years, additional studies should be arranged at the discretion of the superintendent for her special needs.

JANUARY CLASS (PROBATIONARY WORK DURING DECEMBER)

FIRST YEAR

Junior work—January to May
Vacation period—June and July
Intermediate work—August to December

SECOND YEAR

No theoretical instruction—January to July
Senior work—August to December
Graduate—January 1

MAY CLASS (PROBATIONARY WORK DURING APRIL)

FIRST YEAR

No theoretical instruction—May to July
Junior work—August to December
Intermediate work—January to April

SECOND YEAR

Vacation period—May to July
Senior work—August to December
No theoretical instruction—January to April
Graduate—May 1

AUGUST CLASS (PROBATIONARY WORK DURING JULY)

FIRST YEAR

Junior work—August to December
Intermediate work—January to April
Vacation period—May to July

SECOND YEAR

Senior work—August to December
No theoretical instruction—January to July
Graduate—August 1

OUTLINE OF THEORETICAL WORK. This instruction arranged for four terms requires at least 25 months and should be increased to 36 months as rapidly as the development of the school warrants. The superintendent and assistant give no lessons in June and July or on

Wednesdays or Fridays or Saturdays during the year except in probationary work.

Probationary term. This comprises one month, two weeks of which or 16 days at least are given to lessons. For details see weekly schedule.

Junior term. This comprises eight months, five of which or 20 weeks are given to lessons; for three months no theoretical instruction is given.

Beginning the first week of January and the first week of August give on Tuesdays from 4 to 6 p. m. medical nursing, 20 lessons in theory and eight practical demonstrations; on Thursdays from 4 to 6 p. m. anatomy—10 lessons; surgical nursing—six lessons in theory and five lessons in practice; gynecology—four lessons in theory and one in practice. Dietetics on Fridays from 4 to 6 p. m. for 20 weeks. Provide for examinations in the third week of May and in the third week of December.

Intermediate term. This comprises eight months, four of which or 16 weeks are given to lessons; for four months no theoretical instruction is given.

Beginning the first week of January and the last week of August give on Mondays from 4 to 6 p.m. obstetrics—eight lessons; materia medica—six lessons; from January to April children's diseases—eight lessons; materia medica—six lessons. Provide for examinations in the last week of April and the third week of December.

Senior term. This comprises eight months, four of which or 16 weeks are given to lessons; for four months no theoretical instruction is given. This instruction is for the graduate class and given in the fall only.

Beginning the last week of August give on Wednesdays from 5 to 6 p. m. 16 lectures, four each to (1) medicine, (2) surgery and bacteriology, (3) obstetrics and gynecology, (4) children's diseases and contagious nursing. Provide for examinations in the third week of December.

A WEEKLY PROGRAM OF THE WORK OF THE TERMS. As very few lectures cover two hours and as the lesson periods of very few training schools are two hours long the time indicated in this arrangement is maximum. The probationary term is not provided for in this outline and should be arranged by the superintendent for those months during which the work is lightest.

Mondays. The intermediates meet the superintendent and assistants from 4 to 6 p. m. for 16 weeks from the first week of January

to the third week of April and from the last week of August to the second week of December inclusive, the examinations being held in the last week of April and the third week of December.

Tuesdays. The juniors meet the superintendent and assistants from 4 to 6 p. m. for 20 weeks from the first week of January to the second week of May and from the first week of August to the second week of December, the examinations being held in the third week of May and the third week of December.

Wednesdays. The seniors take lectures from the medical staff from 5 to 6 p. m. for 16 weeks during the fall term only, i. e. from the last week of August to the second week of December, the examinations being held in the third week of December.

Thursdays. The juniors meet the superintendent and assistants from 4 to 6 p. m. for 10 weeks from the first week of January to the second week of March and from the first week of August to the first week of October, the examinations being held in the third week of May and the third week of December.

Fridays. The juniors meet the dietitian from 4 to 6 p. m. for 20 weeks from the first week of January to the second week of May and from the first week of August to the second week of December, the examinations being held the third week of May and the third week of December.

SYLLABUS

PROBATIONARY TERM. In outlining a time schedule of the 16 days of preliminary training the instruction in bandaging, theory and ethics is assigned to the superintendent of the training school; the practical work and the care of their own rooms to the assistant superintendent; the diet kitchen to the dietitian; the elementary anatomy to a head nurse, and the supply room to the head nurse in charge of the supply room.

SCHEDULE OF PRELIMINARY TRAINING. Assuming that eight probationers arrive on Tuesday, they should be divided into groups of four each, A and B, for the 8.15 a. m. period. At the subsequent lessons of the day both groups meet together.

WEDNESDAY AND MONDAY

MORNING

7.40	Breakfast
8.15	Group A in diet kitchen; group B in care of their own rooms
10	Theory and ethics of nursing
11-1.30	Off duty, dinner 12.45

AFTERNOON

- 1.30-2.30 Bandaging
- 2.30-4.30 Practical demonstration by the teacher
- 4.30 Off duty

THURSDAY, SATURDAY AND TUESDAY.

MORNING

- 7.40 Breakfast
- 8.15 Group A in supply room; group B in care of their own rooms
- 10 Theory and ethics of nursing
- 11-1.30 Off duty, dinner 12.45

AFTERNOON

- 1.30 Elementary anatomy
- 2.30-4.30 Practical demonstration by a pupil
- 4.30 Off duty

FRIDAY

MORNING

- 7.40 Breakfast
- 8.15 Group A in diet kitchen; group B in care of their own rooms
- 10 Theory and ethics of nursing
- 11-12.30 Practical demonstration by the teacher
- 12.45 Dinner

AFTERNOON

Off duty

SUNDAY

No instruction required

The second Friday the groups change work at the 8.15 a. m. period but otherwise the next eight lessons follow the same daily schedule. By this schedule each group has eight room lessons, four lessons in the supply room, and four in the diet kitchen. All students have eight lessons on bandaging; eight in anatomy; 18 in theory and ethics; and 16 practical lessons. The four lessons in ward work should be given in two groups by two instructors.

OUTLINE OF PRACTICAL DEMONSTRATIONS. These 16 lessons are given from 2.30 to 4.30 unless otherwise indicated.

- 1 Wednesday. Dusting, carbolizing bed, making show bed
- 2 Thursday. General survey of the hospital
- 3 Friday. 11.30 a. m. Making bed (patient in bed)
- 4 Saturday. Care of rubber goods (sheets, hot water bags, ice caps, enema tubes, rubber rings) care of instruments, making cotton balls
- 5 Monday. Admitting stretcher cases; undressing patient, bath; care of clothing and valuables
- 6 Tuesday. Washing hair, care of back, mouth, teeth; adjusting bed pan

- 7 Wednesday. Feeding helpless patients; getting patient up in bed; sitting patient up out of bed
- 8 Thursday. Ether bed, care of patient; changing mattress
- 9 Friday, 11.30 a. m. Temperature, pulse, charting, bedside notes, respiration
- 10 Saturday. Mustard pastes, stupes, poultices
- 11 Monday.. Patients' clothing closets in wards. Listing
- 12 Tuesday. In ward lavatories; dusting; measuring urine; preparation of specimens; care of toilets, bed pans, catheters, douche nozzles, etc. Instruments, etc.
- 13 Wednesday. Linen closets in wards
- 14 Thursday. In ward dining rooms; refrigerators, gas stoves, cupboards, trays etc.; serving
- 15 Friday, 11.30 a. m. Review; enemata (purgatives, nutritive, stimulative
- 16 Saturday. Review; method of preparing and giving the douche
On duty in wards 4.30 p. m. Saturday and Sunday a. m. Regular duty
Monday.

THEORY AND ETHICS OF NURSING. 18 lessons.

- 1 House rules, hospital etiquette, nursing ethics
- 2 A description of the various kinds of beds; bed-making, care of mattress, pillows, blankets, etc.
- 3 Personal hygiene, asepsis
- 4 Sick room and ward hygiene; ventilation; heating
- 5 A new patient; care of clothing and valuables
- 6 Causes and prevention of bed sores
- 7 A description of the various kinds of baths; temperature of baths
- 8-10 Ethics of nursing
- 11 Solid and fluid preparations; modes of administration; the making of solutions
- 12 Signs and abbreviations, weights and measures, percentage
- 13 The metric system
- 14 Antiseptics and disinfectants
- 15 Meaning of medicine; time of giving; medicine lists; medicine closets
- 16 Administration of drugs; approximate value of the different methods; dosage for adults and for children; methods of determining amounts
- 17 Classification of drugs and chemicals; simple hypnotics; common cathartics and ordinary heart stimulants, depressants and sedatives
- 18 A general knowledge of the preparation, strength, doses, physiologic action, poisonous symptoms, and treatment of aconite, alcohol, arsenic, belladonna, bromin, carbolic acid, chloral, digitalis, ether, iodine, iron, nux vomica, mercury, nitro-glycerin, opium

ELEMENTARY ANATOMY. These eight lessons in elementary anatomy are outlined for the probationary term and should serve as an introduction to the subject and as a preparation for the more extended study of the same in subsequent terms.

- 1 Tissues, systems, cavities and organs contained therein
- 2 The osseous system: classes of bones, their composition and development; bones of the head

- 3 Bones of the trunk and limbs
- 4 Muscles: attachments
- 5 The digestive system; alimentary canal
- 6 The circulatory system; pulmonic, systemic, portal, hemorrhages
- 7 The respiratory system
- 8 Executory system

BANDAGING. Eight lessons.

- 1 Spiral, figure of eight, reverse bandages
- 2 Arm bandage, elbow, shoulder spica
- 3 Hand bandages
- 4 Foot and leg, including heel
- 5 Barton eye bandages
- 6 Binders of various kinds
- 7 Finger thumb spica
- 8 Review

JUNIOR TERM. Medical nursing—The 20 lessons in the theory of medical nursing and eight practical demonstrations are planned for Tuesdays 4 to 6 p. m. from the first week of January and of August.

Practical demonstrations

- 1 Making and applying poultices, fomentations, ice poultices, counter irritants, dry cupping
- 2 Hot baths, hot packs, vapor baths, mustard packs and foot baths
- 3 Typhoid tub baths, anterior packs, alcohol sponge baths, cold packs, ice coils
- 4 Preparation for lavage, gavage, nasal feeding
- 5 Preparation for infusion, phlebotomy and hypodermoclysis
- 6 Preparation for thoracentesis, paracentesis, exploratory puncture of chest, lumbar puncture and blood culture
- 7 Test meals, special diets, administration of oxygen, use and care of cautery
- 8 Keeping of temperature charts and bedside notes

Theoretical instruction

- 1 Observation of symptoms; two lessons
- 2 Medical emergencies, including cases of acute poisoning; two lessons
- 3 Fevers. Typhoid, pneumonia, malaria, and cerebro-spinal meningitis; three lessons
- 4 Physiology and diseases of the blood; three lessons
- 5 Physiology and diseases of the respiratory system; three lessons
- 6 Physiology and diseases of the kidneys; one lesson
- 7 Physiology and diseases of the alimentary tract; three lessons
- 8 Physiology and diseases of the nervous system; three lessons
- 9 Urinalysis should be given by practical instruction in the laboratory during the second year, the class being divided into sections. It naturally follows or supplements the work of materia medica outlined for the intermediate term.

Methods of instruction

- The practical lessons should be given by sections when the size of the classes demands it.
- The demonstrations should be given by the head nurses but senior pupils may be employed if necessary.
- The clinical teaching in the wards should be given by supervisors or competent head nurses; but the clinical instruction should be given by physicians.
- The classes should recite regularly and written quizzes should be required frequently.
- Occasional lectures on up to date methods and on the progress in the prevention and treatment of diseases should be afforded the nurses in training.

SURGICAL NURSING AND GYNECOLOGY

These 20 courses in surgical nursing and gynecology and six practical demonstrations are planned for Thursdays from 4 to 6 p. m. from the first week of January and of August

Practical demonstration

- 1 Use of antiseptics, aseptic, disinfectants, germicides, deodorants; sterilization by heat and chemic agents
- 2 Nurse's technic in preparing sterile dressings and utensils, in assisting at surgical dressings, and in preparing for and during operations
- 3 The preparation of the patient for the operation and his after care
- 4 The preparation for gynecologic examinations, and the positions for the same
- 5 The application of splints and extensions
- 6 Bandaging

Theoretical instruction

These 20 lessons can be covered in 10 lectures of one half hour each and six lessons of one hour and one half each in practical demonstration, which should include bandaging. The lectures can be given by the superintendent of the training school and the practical demonstrations by the assistant.

The 10 lessons in anatomy should include a review of the preliminary work in this subject and a thorough study of

- 1 The heart
- 2 The vascular system and the general circulation
- 3 The artificial distribution and the venous return
- 4 The lungs and pulmonary circulation

- 5 The liver and the portal circulation
- 6 The lymphatics
- 7 The stomach and intestines
- 8 The kidney and urinary tract
- 9 The brain and spinal cord
- 10 The nervous system

The theory of surgical nursing should include,

- 1 Bacteriology; cell life
- 2 The varieties, causes and healing of wounds; inflammation; suppuration etc.
- 3 The principles of aseptic and antiseptic surgery; the preparation and use of dressings and disinfectants
- 4 The technic of the operating room, in the hospital and in private houses
- 5 The preparation for and care of patients during and after operations
- 6 Surgical emergencies, fractures, shock, sprains, and dislocations; foreign bodies in the ear, etc.; the accidental swallowing of sharp bodies; burns, scalds, frost bites, etc.

The instruction in gynecology should include

- 1 Anatomy and physiology of the pelvic organs
- 2 Diseases to which these organs are liable; gynecologic terms and definitions
- 3 Preparation of patients for operations and examinations
- 4 Care of patients after various operations, including nursing until convalescence is established

DIETETICS. The course in dietetics is planned for Friday from 4 to 6 p. m. The 20 lessons in theory and the 20 lessons in practical work with visits to markets should be given from the first week of January and of August. The time should be divided somewhat as follows: quiz on previous lesson 15 minutes, talk by teacher on theory 15 minutes, practical work 90 minutes. It is suggested that a section should not be larger than eight, and that nearly all work should be individual. It is also suggested that the first 14 lessons should be correlated with anatomy and physiology, and the last six lessons with work in special diseases.

OUTLINE

Lesson 1: Classification of foods; coffee. Lesson 2: Mineral foods; mineral waters. Lesson 3: Carbohydrates—starch, dextrose. Lesson 4: Carbohydrates—cellulose, cereals, vegetables. Lesson 5: Carbohydrates—nuts, legumes. Lesson 6: Carbohydrates—sugar, fruits. Lesson 7: Fats and oils, salads. Lesson 8: Proteids—milk. Lesson 9: Proteids—eggs. Lesson 10: Proteids—meat, roasting and broiling. Lesson 11: Proteids—meat, stock

and broths, fish. Lesson 12: Proteids—gelatin. Lesson 13: Review; bread. Lesson 14: Review; frozen mixtures, sponge cake. Lesson 15: Computing diataries, soft and liquid diets. Lesson 16: Children's diet; convalescent diet. Lesson 17: Diabetic diet. Lesson 18: Rheumatic diet. Lesson 19: Fever and post-operative diet. Lesson 20: General review; preparing trays.

LESSONS IN DETAIL

Lesson 1. Theory. Classification of foods; definition; illustration—body compared to steam engine; requirements—life ration, working ration, sick ration. Five food principles: organic—(1) proteids, (2) fats, (3) carbohydrates; inorganic—(4) water, (5) salts. Water. Begin with water because it is the simplest of the food principles. Definition; constituents; solids and gases; taking—temperature for, when, object; boiling water—method, observations, effect of elevation, effect of constituents, result, Amount found in body, daily income and outgo, effect of increase or diminution in diet. Influence of water on digestion, on absorption, on metabolism. Uses in body. Coffee: uses and abuses; effect on digestion.

Practical work. Demonstration of measurements. Each member of the class makes coffee, and by groups (1) coffee by the cold method, (2) by the drip method, (3) coffee punch, (4) coffee egg nog.

Lesson 2. Theory. Mineral food, mineral waters. Salts: amount found in the body; necessity in food; food value in heat, energy, tissue building. Kinds: calcium, sodium, phosphorus, magnesium, iron sulfur, potassium; uses of each in body. Vegetable acids: oxalic, citric, malic, tartaric. Mineral waters: where found, chemical constituents, when and how taken, uses in the body. Kinds: alkaline waters, alkaline sulfur waters, alkaline and saline purges, chalybeates, acidulous, other waters such as arsenic and alum. Practical work. Each member applies flame test for sodium, potassium, calcium, strontium, by borax bead and brunsen burner and by groups: (1-2) fruit syrups with carbonated waters, (3) egg lemonade, (4) claret cup, (5) fruit punches, (6) fruit albumen, (7) apple water, (8) fruit egg nog.

Lesson 3. Theory. Carbohydrates: source, composition, food values. Starch and dextrine: sources, physical properties, under the microscope, digestion, food value.

Practical work. Each member scollops oysters, toasts bread and applies cream sauce and by groups make (1) milk punch (2) junket.

Lesson 4. Theory. Cellulose: composition, structure, use in

dietary, digestion, when allowed or forbidden. Cereals and vegetables: sources, composition, structures, forms used for food, comparative amounts of cellulose to remove cellulose, digestion, food value.

Practical work. Each member bakes a potato, one-half the class boils rice, one-half cooks a vegetable to be served with cream sauce or melted butter, and by groups prepare (1) a breakfast cereal in large quantities (2) a gruel.

Lesson 5. Theory. Nuts and legumes: sources, composition, structure, cooking, digestion, food value.

Practical work. Each member makes cream soup of either green peas, lima beans, split peas, almond meal or lentils, and by groups: (1) toasted almonds, (2) salted peanuts, (3) macaroons, (4) almond gluten cakes, (5) nuttose.

Lesson 6. Theory. Sugar: comparison of sucrose, glucose, levulose, lactose; source, preparation, composition, properties, digestion, food value. Fruits: dried, fresh, preserved; source, composition, structure; cooking, digestion, food values.

Practical work. Each member makes cranberry jelly; bakes an apple, and makes peanut brittle and by groups: (1) scalloped apples, (2) lemon sauce, (3) apple sauce, (4) stewed dried fruit.

Lesson 7. Theory. Fats and oils: sources, composition, structure digestion, cookery, food value; selection for an invalid. Salads: vegetables used, food values; salts and cellulose present. Calorie: definition, how determined, calories in certain weight of food principles.

Practical work. Each member makes vegetable salad, French or Chinese dressing; cream of potato soup, and by groups four fruit salads.

Lesson 8. Theory. Proteids: composition, divisions, necessity for, sources. Milk: source, composition of human and cow's milk, digestion, effect of heat, food value.

Practical work. Each member makes cocoa and by groups modify milk by (1) albumenizing, (2) peptonizing, (3) pasteurizing, (4) sterilizing, (5) cocoa punch, (6) cocoa egg nog.

Lesson 9. Theory. Eggs: composition, structure, selection, preservation, cookery, tests, digestion, food value.

Practical work. Each member makes a custard, and an omelet, and by groups prepare eggs (1) hard boiled, (2) soft boiled, (3) creamy, (4) shirred, (5) in tomato sauce, (6) in nest, (7) scrambled.

Lesson 10. Theory. Study of albumen, myosin, fibrin, cod-fat, suet, marrow, mineral matter. Meat: structure, composition, waste, selection of cuts, broiling, roasting, pan broiling; digestion, food value.

Practical work. Each member makes a raw beef sandwich, or a

beef salad and by groups (1) roast chicken, (2) broiled steak, (3) mashed potatoes.

Lesson 11. Theory. Study of gelatin, kreatin, kreatinin. Composition of stock, broth, peptonized beef broth, beef juice. Fish: scaly, white, oily, examples; shell, mollusks, crustaceous, examples; how to determine fresh fish; composition; cookery—object, method, effect; digestibility.

Practical work. Each member makes clam broth and by groups (1) plain and peptonized beef broth, (2) beef juice, (3) stock, (4) oyster stews.

Lesson 12. Theory. Commercial forms of gelatin; source, composition, digestion, food value, methods of using.

Practical work. Each member makes plain jelly and snow pudding, or charlotte russe and by groups mix bread.

Lesson 13. Theory. Wheat: structure, composition, milling, gluten, use in bread. Yeast: growth, structure, action upon sugar. Bread: process of making, composition, digestion, food value.

Practical work. Each member molds and bakes rolls and bread sticks, pan-broils chops, and by groups make (1) chocolate, (2) whipped cream, (3) pulled bread.

Lesson 14. Theory. Effect of freezing mixtures and use of ice cream freezer. Ice cream: composition, digestion, food value, use for invalid.

Practical work. Each member makes small amount of ice cream or water ice without freezer also a small sponge cake and by groups a large amount of ice cream in freezer.

Lesson 15. Theory. Dietary standards: how obtained, how modified, practical applications. Dietaries: amount determined by occupation, age, size and weight, climate; composition by occupation, age, climate idiosyncrasies, health; cost by composition, season and location.

Practical work. Review by groups soft and liquid diets assigning new preparations to the various divisions, and by groups various gruels.

Lesson 16. Theory. Children's diet: first year—amount and composition, weaning; second year—kinds; third and fourth year—hours; adolescence.

Practical work. Prepare by groups (1) a breakfast for a convalescent man, (2) a dinner for a convalescent woman, (3) a supper for a convalescent child.

Lesson 17. Theory. Review by carbohydrates and extractives,

comparison of food value of carbohydrates and fats, digestion of fats, amounts of fats absorbed, amount of extractives allowed. Study of cheese, white meats, fish, eggs, cream, olive oil, gluten flours, saccharine.

Practical work. Prepare by groups: (1) cream soups and sauces, thickened with egg; (2) pan broiling of chops; (3) fish; (4) cabbage with butter; (5) celery in cream and codfish in cream; (6) gluteroni with cheese and tomatoes; (7) desserts with saccharine, gluten bread, wafers and nut cake; (8) diabetic milk, and salads.

Lesson 18. Theory. Review by extractives, nuts and legumes, comparisons of vegetable and animal proteids and substitutions in dietary.

Practical work. Prepare by groups: (1) cream of legumes and vegetable soups; (2) broiled and baked fish; (3) creamy rice pudding; (4) vegetables; (5) creamed chicken.

Lesson 19. Theory. General and abdominal fevers or operations, food principles needed in diet, digestion in fevers, absorption of and residue from the following foods: milk, eggs, soup stock, broths, meat and fish juices, malted and peptonized foods, gruels.

Practical work. Prepare by groups: (1) milk fortified by fresh or dried albumen; (2) somatose; (3) plasmon; (4) albumen with fruit juices; (5) ice cream with plasmon; (6) use of malted milk.

Lesson 20. Theory. Questions on theory of course and on practical cooking; answers to be written and marked on a scale of 10, viz., results 5, neatness 3, deftness 2.

Practical work. Each pupil to be given a recipe with ingredients and proportions only, but no method, and to work without instructions and by groups: (1) three pupils prepare a breakfast tray; (2) one prepare fruit and set tray; (3) one prepare omelet; (4) one prepare toast and coffee; (5) three prepare dinner for convalescent; (6) one make salad and set tray; (7) one broil chop and cook potatoes; (8) one make clam broth and cook vegetables.

Practical review (suggestive). (1) Two pupils prepare luncheon for diabetic; (2) one make gluten wafers and set tray; (3) one make cream soup with egg thickening.

INTERMEDIATE TERM. The eight lessons each in obstetrics and in children's diseases and the 12 lessons in materia medica are planned for Mondays from 4 to 6 p. m. from the first week of January and the last week of August.

Obstetrical nursing. To be eligible for registration the school

must provide that each nurse have the care of not less than six cases, during labor and through the puerperium; general hospitals unable to afford this minimum training should affiliate with an obstetrical hospital.

The eight practical lessons should include:

- 1 The preparation of room and patient for normal labor
- 2 The preparation of patient for different positions for examination or delivery
- 3 The massage and treatment of the breasts
- 4 The application of the band
- 5 The baby's first bath
- 6 The care and management of the incubator
- 7 The special care of the baby's eyes, nose, mouth, and genitals
- 8 The preparation of the baby's food

The eight theoretical lessons should include:

- 1 Anatomy and physiology of the reproductive system
- 2 Pregnancy and labor; care required during those periods
- 3 Care during the puerperium under normal and abnormal conditions
- 4 (a) Obstetric operations. (b) Presentations and positions
- 5 Obstetric complications during and after labor.
- 6 The care of the new born infant
- 7 Infant feeding
- 8 The care of premature infants

Nursing of children. Students of registered schools connected with children's hospitals should serve a six months term in an adult hospital including the required training in obstetrical nursing.

The question of the limitation of childhood and children's diseases has arisen in the administration of the hospitals and it is assumed that most hospitals draw the line at the 14th year, and 5 years of age is the usual demarcation for infant diseases.

The eight practical lessons in the nursing of children should include,

- 1 Artificial feeding; the care of bottles, utensils etc.
- 2 Methods of mild restraint for delirious children, or for children with skin diseases
- 3 Children's dosage
- 4 Tubbing of children without fright
- 5 Disinfection of room, utensils, patient and nurse during and after contagious illness
- 6 Care of intubation and tracheotomy tubes
- 7 Irrigation of throat in diphtheria
- 8 Inhalations, vapor, steam and hot air apparatus

The eight theoretical lessons in the nursing of children should include:

- 1 The preliminary study of infancy and childhood. Dietaries up to 7 years. General hygiene. Dentition
- 2 The diseases of nutrition; rachitis, marasmus; the alimentary tract, stomach and intestines
- 3 The internal organs, kidneys, liver, heart
- 4 The mouth, air passages, lungs
- 5 Diseases of the skin, blood and glands
- 6 The eye and the ear; nursing technic
- 7 Nervous diseases
- 8 The unclassified diseases

Materia medica. The 12 lessons of the intermediate term should be introduced by a review of the instruction given in the preliminary.

- 1 Classification, source, appearance and action of drugs; alkalines; alkaline earths; the metals
- 2 Nonmetallic elements; inorganic and organic acids, carbon compounds
- 3 The vegetable kingdom; the animal; miscellaneous drugs
- 4 **Materia medica.** Remedial agents and their uses: heat, cold, light, air, electricity, water, serums, transfusions; pharmaceutic terms
- 5 Dosage; idiosyncrasy; toleration; habit; hypnotics; how and when to give doses; trional; veronal; sulfonal; sodium and potassium bromide; chloral hydrate; codeine
- 6 Cathartics: how and when to give doses, physiologic action; castor oil; calomel; cascara; compound licorice powder; Epsom salts; Rochelle salts; seidlitz powder
- 7 Heart stimulants; doses, whiskey; brandy; strychnine sulfate; aromatic spirits of ammonia; coffee; camphor; digitalis; nitro glycerin; normal salt solution
- 8 The use of opium and its preparations: alkaloids; physiologic action; precautions in its use; morphine, its preparation and doses.
- 9 The use of belladonna, aconite and nux vomica; physiologic action; precautions
- 10 Physiologic actions and constitutional symptoms of the more important drugs, their preparations and doses: iron, arsenic, mercury, alcohol, quinine, potassium iodide
- 11 Ether, chloroform, cocaine, digitalis, strophanthus, colchicum
- 12 Carbolic acid, coal tar preparations, as antipyrin, phenacetine, etc.; salicylates; saccharin

SENIOR TERM. The 16 lectures of the graduating class are planned for Wednesdays from 5 to 6 p. m. and should be given by physicians in Medicine. The four lectures should include:

- 1 Acute medical diseases
- 2 Chronic medical diseases

- 3 Nervous diseases
- 4 Medical emergencies; common poisons and their antidotes

Bacteriology and Surgery. The four lectures should include:

- 1 Cell life; the germ theory; principles of aseptic and antiseptic surgery
- 2 Disinfectants and germicides; disinfection and quarantine; healing of wounds, varieties and treatment
- 3 Anesthetics and their administration; care of patients before, during and after operation
- 4 Emergencies, shock, hemorrhage etc.; diagnosis and treatment of fractures, dislocations, contusions and sprains

Obstetrics and Gynecology. The four lectures should include:

- 1 Anatomy and physiology of the pelvic organs; signs of pregnancy; normal labor, its physiology and management both in hospital and private practice
- 2 Special complications and emergencies in obstetric cases
- 3 Care of puerpera and new born infant
- 4 Diseases to which women are liable; nursing, including laparotomy cases

Children's diseases and Contagious nursing, The four lectures should include:

- 1 Children's diseases: noncontagious class; symptoms and preventive treatment
- 2 Hydrotherapy; elimination of toxin; the exanthemata
- 3 Diphtheria and the infectious fevers; emergencies, complications and sequelae
- 4 Inoculable and specific diseases; tuberculosis; epidemic cerebro-spinal meningitis

TEXTBOOKS. The textbooks recommended for the course and reference works for the nurse training school library should include:

PRACTICAL NURSING

ROBB. Principles and Practice of Nursing. E. Koeckert, 702 Rose Bldg, Cleveland, O. \$2.

WEEKS. Text Book on Nursing. Appleton & Co. 436 5th av. New York. \$1.75.

MATERIA MEDICA

DOCK. Materia Medica. G. P. Putnam's Sons, 27-29 W. 23d st. New York. \$1.50.

GROFF. Materia Medica for Trained Nurses. Blakiston & Co. 1012 Walnut st. Philadelphia, Pa. \$1.25.

DIETETICS

FARMER, FANNIE M. Food and Cookery for the Sick and Convalescent. Little, Brown & Co. Boston, Mass. \$1.50 net.

FRIEDENWALD & RUHRAH. Dietetics for Nurses. Saunders & Co. 925 Walnut st. Philadelphia, Pa. \$1.50 net.

PATTEE, ALIDA F. Practical Dietetics with reference to Diet in Disease. Alida F. Pattee, 52 W 39th st. New York. \$1 net.

- BOLAND. Handbook of Invalid Cooking. Century Co. 33 E. 17th st. New York. \$2.
 CONN'S Bacteria, Yeasts and Moulds. Ginn & Co. New York. \$1.

THEORY AND ETHICS OF NURSING

- ROBB. Nursing Ethics. E. Koeckert, 702 Rose Bldg. Cleveland, O. \$1.50.
 NIGHTINGALE. Notes on Nursing. Appleton & Co. 436 5th av. New York. 75c.

MEDICINE

- STEVENS. Practice of Medicine. Saunders & Co. 925 Walnut st. Philadelphia, Pa. \$2.50 net.
 HUGHES. Practice of Medicine. Blakiston & Co. 1012 Walnut st. Philadelphia, Pa. \$2.50.
 WILLIAMS. Essentials of Practice of Medicine. Saunders & Co. 925 Walnut st. Philadelphia, Pa. \$1.75.
 WILCOX. Fever Nursing. Blakiston & Co. 1012 Walnut st. Philadelphia, Pa. \$1.
 OSLER. Practice of Medicine. Appleton & Co. 436 5th av. New York, sold on subscription. \$5.50.

SURGERY--GYNECOLOGY

- ECCLES, W. McADAM. Elementary Anatomy and Surgery for Nurses. E. R. Pelton, 19 E. 16th st. New York. \$1 net.
 DAVIS. Obstetric and Gynecologic Nursing. Saunders & Co. 925 Walnut st. Philadelphia, Pa. \$1.75 net.
 VOSWINKEL. Surgical Nursing. Blakiston & Co. 1012 Walnut st. Philadelphia, Pa. \$1.
 DAVIS, G. G. Principles and Practice of Bandaging. Blakiston & Co. 1012 Walnut st. Philadelphia, Pa. \$1.50.

OBSTETRICS

- COOKE. A Nurse's Handbook of Obstetrics. J. B. Lippincott, Washington sq. Philadelphia, Pa. \$2 net.
 DE LEE. Obstetrics for Nurses. Saunders & Co. 925 Walnut st., Philadelphia, Pa. \$2.50 net.

CHILDREN'S DISEASES

- WHEELER. "The Baby"—His Care and Training. Harper & Brothers, Franklin sq. New York. \$1 net.
 ROTCH. Pediatrics. J. B. Lippincott, Washington sq. Philadelphia, Pa. \$6 net.
 SACHS. Nervous Diseases of Children. William Wood & Co. 51 5th av. New York, \$4 net.
 HOLT. Care and Feeding of Children. Appleton & Co. 436 5th av. New York. 75c net.
 DAVIS, A. E. & DOUGLASS. Eye, Ear, Nose and Throat. F. A. Davis Co. 1914-16 Cherry st. Philadelphia, Pa. \$1.25.

ANATOMY AND PHYSIOLOGY

- KIMBER. Anatomy and Physiology for Nurses. Macmillan Co. 64-66 5th av. New York, \$2.50.
 GOULD, S. Medical Dictionary—30,000 words. Blakiston & Co. 1012 Walnut st. Philadelphia, Pa. \$1 net.